

## ABSTRACT OF THE DISCLOSURE

A method for measuring a directional of a body in a three-dimensional space defined by an X-axis (magnetic north), a Y-axis, and a Z-axis is proposed. A geomagnetic force along an x-axis, which is the direction towards which the body points and an x-axis tilt angle, which is an angle between the horizontal plane and the x-axis, are detected. The x-axis tilt angle is determined as a rotation angle, which an angle by which the x-axis needs to be rotated around the Y-axis so as to be in the XY-plane. An azimuth of the body is calculated from the geomagnetic force and the rotation angle.